4.1. Successful cases of capacity building in higher education projects

Academic training programs have become essential in enhancing the quality of higher education and bene-fiting broader communities, particularly in disadvantaged areas. These programs, which include seminars, workshops, and online courses, not only improve teaching, learning, and research but also contribute to staff development and institutional stability. A crucial aspect is the internationalization of academic insti-tutions, promoting global collaboration and broadening participants' educational experiences.

Many training initiatives focus on social innovation, using applied research to address societal cha-llenges. Successful projects share common traits: a holistic approach addressing pedagogy, research, and leadership; customization to fit institutional needs; continuous evaluation for improvement; and collaboration with other institutions. These programs often rely on support from organizations like the European Union and the World Bank, which provide funding and resources for their success.

Despite their success, challenges remain, particularly in ensuring long-term sustainability amid econo-mic or political instability. Nonetheless, these programs have demonstrated significant positive impacts on education and community development, offering replicable models for other institutions. This part of the book highlights 13 case studies of successful academic training projects, documenting their achievements, sustainability, and lessons learned. These examples serve as valuable guides for future initiatives aiming for sustainable development in higher education.

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Academic training programs have become a fundamental pillar of quality improvement in the field of higher education, extending their positive impacts to the wider community; in certain cases, even providing opportunities for social and economic development to traditionally disadvantaged groups, especially when these programs are rolled out in territories where disadvantage is widespread. These training programmes can include seminars, workshops, visits, online courses and further education programs, among others.

Adequate academic training not only improves the quality of teaching and learning, or the quality of research activity, but also contributes to staff stability and development, fosters a positive working

environment and supports the mission and vision of the institution. Moreover, training enables institutions to adapt to rapid changes in the educational, economic and social landscape.

A key aspect of training programs is the internationalization of the academic institution. Programs that promote international academic mobility, transnational research collaboration and the integration of global perspectives into the curriculum have contributed to the creation of a more diverse and enriched academic community. These efforts not only broaden the educational horizons of participants, but also foster collaboration and intercultural understanding.

The notion that universities have an important role to play in supporting social innovation has guided many of these capacity-building projects. Through applied research and collaboration with local communities, universities have developed innovative solutions to social and economic problems. This orientation towards social responsibility has strengthened the link between academia and society, demonstrating the positive impact that higher education institutions can have on their environment.

There are academic training projects that have been recognized as success cases. These successful projects share several common characteristics that have contributed to their effectiveness and sustainability. First, these academic training programmes adopt a holistic approach that encompasses various aspects of professional development, including pedagogy, research and leadership and management; this approach allows them to address the multiple dimensions of academic work. Secondly, these programmes are tailored to the specific needs and contexts of each institution and territory. Contextualization ensures that training is relevant and applicable, which increases its impact and effectiveness. In addition, implementing evaluation and feedback mechanisms is fundamental to the success of any training program; continuous evaluation allows for identifying areas for improvement and adjusting programs to maximize their effectiveness. Finally, collaboration with other institutions and participation in academic networks are essential components of successful training programs. These collaborations provide access to new ideas, resources and professional development opportunities.

The support of donor institutions has been instrumental in the success of many of these academic training projects. Organizations such as the European Union, the World Bank, the Inter-American Development Bank, the African Development Bank, and higher education institutions themselves, among others, have provided funding, resources and expertise for the development of training programs. These institutions not only provide funds, but also facilitate international collaboration, provide access to knowledge networks and encourage the adoption of global best practices. Publicly funded academic training is a strategic investment to improve the quality of education and promote the professional development of teachers and students. Successful projects in this area have demonstrated that through careful planning, innovative methodologies and continuous evaluation, it is possible to achieve significant impacts on the quality of education and the socio-economic development of communities.

Several important lessons have emerged from the implementation of these academic training projects. Customization of training programs to address the specific needs of participants and the institutional context is key to their success. In addition, collaboration across institutions and with external experts enriches training programs and expands professional development opportunities. Continuous evaluation and feedback are essential to adapt and improve training programmes, ensuring that they meet their objectives and respond to changing needs. Finally, the sustainability of training projects depends on institutional commitment and adequate resource allocation for implementation and continuity. Despite the successes achieved, the implementation of publicly funded academic training projects faces several challenges. One of the main challenges is to ensure the long-term sustainability of these programs.

Dependence on government funding can be a limiting factor, especially in contexts of economic insta-bility or changes in educational policies.

Undoubtedly, academic capacity building projects in Higher Education Institutions (HEI) have proven to be an effective tool for improving the quality of teaching and research. Through comprehensive, adaptive and collaborative approaches, these projects have generated positive results and established replicable models for other institutions. The documentation and analysis of these success cases, largely sup-ported by donor institutions, provide valuable lessons and recommendations for future initiatives, thus contributing to sustainable development and academic excellence in higher education.

This fourth part of the book is devoted to thirteen academic training success cases. In each of them, following the same structure, the different authors tell us about the background of their project, the main achievements, the products, results and impacts generated, the factors that led to success, the sustainability of the project and the lessons learned, closing their delivery with a section devoted to the final conclusions. As editors of this book, we would like to thank all the authors of these thirteen projects for their time and effort. Before addressing each project, a synthesis of each project is pre-sented as a quick and easy read.

Rosa M. Batista-Canino and Silvia Sosa-Cabrera present a project of socio-economic relevance in the context of the countries in which it was developed. INSTART, Euro-African Network of Excellence for Innovation and Entrepreneurship, was designed as a 'Capacity Building in the Field of Higher Education Project' to enhance the knowledge triangle (i.e. education, research, and innovation) by promoting an entrepreneurial and innovative culture in higher education, and as a way of creating an effective inter-action between universities, businesses and society. The Consortium was composed of 12 universities from the South Mediterranean Region (MED) (i.e. Algeria, Egypt, Libya, Morocco, and Tunisia) and 4 European universities from Spain, Portugal, Italy and Poland. These universities, along with several social partners, worked together to make the quintuple helix approach (i.e., university-industry-govern-ment-public-environment interactions) a reality. Almost five hundred people from the MED universities, including professors, students, university management teams, and university administration staff, took part in the various actions organized by INSTART, in which activities to support units for the innovation and entrepreneurship ecosystem, as well as a Transversal Acceleration Programme and Marathons for teaching staff, were the star activities of the project. INSTART also provided resources to equip new spaces for innovation and entrepreneurship, and Knowledge Transfer Offices in the participating univer-sities. In a context in which the political turmoil in the wake of the Arab Spring challenged the stability of these countries, INSTART offered the opportunity to develop a favourable climate for collaboration to build a better future for the region.

Carlos Rodríguez Robaina, Raquel Quirós Pozo, Sara Ramírez Bolaños, Priscila Velázquez Ortuño and Lidia Robaina in their chapter entitled the ISLANDAP ADVANCED PROJECT highlight the importance of multidisciplinary work and working on a common goal to meet the needs of Higher Education Institutions (HEIs) to prepare professors and students in a coordinated way to achieve the United Nations' Agenda 2030 Sustainable Development Goals (SDGs), internationally and across regions. In this sense, the key role of HEIs in the socio-economic development of countries, regions, and cities in the context of today's global challenges and needs represents a real opportunity to strengthen inter- and intra-regional ties in order to address common challenges more effectively, with the conviction of achieving the necessary positive multiplier effects. The project´s main objective focuses on improving capacity building through institutional cooperation in three 'outermost regions' (Madeira, The Canary Islands and Cape Verde) involving three fields (aquaculture/aquaponics, tourism/economics and engineering) in order to freely

create synergies around aquaponics and the Circular Economy (CE) as a driver for transdisciplinary university networks geared towards advancements in research and teaching. The design of three areas of knowledge, which in turn interact with one another to address any needs that arise in order to achieve the model's sustainability results, seems to be easy to replicate with success. Therefore, the novel aspect of this case study is how new and improved competences to be developed during a similar project should represent added value during the writing of proposals and objectives.

Silvia Marchionne presents the outcomes of the SAGESSE project, which aimed to improve university governance and autonomy in Tunisia's higher education system. This initiative involved 20 institutions from four countries, including all Tunisian public universities, EU universities, the Tunisian Ministry of Higher Education and Scientific Research, associations, and a quality agency. Co-financed by the European Union under Erasmus+ (CBHE) and coordinated by UNIMED - Mediterranean Universities Network, SAGESSE was the first project uniting all 13 Tunisian public universities. It created a unique dialogue space for university leaders, decision-makers, and staff, in collaboration with the Ministry of Higher Education. Through a benchmarking study and capacity-building activities in Tunisia and Europe, Tunisian Higher Education Institution (HEI) staff enhanced their skills in strategic planning, accountability, financial management, and quality assurance mechanisms. This contributed to establishing a good governance framework and improving institutional autonomy. SAGESSE also created synergies with other national initiatives and programs to support the higher education reform strategy of the Ministry. The project's impact extended beyond its lifetime, as HEIs continued the reform process and joined a new CBHE project on research governance led by a Tunisian university. Finally, the project's lessons offer insights for similar initiatives. Notable outcomes include the development of unique software for qualitative analysis, adopted by all Tunisian HEIs, and the instillation of a culture of quality and results-based performance within the university community.

Carolina Madeleine of the University of Alicante, Spain, and Rofah Makin of Universitas Islam Negeri Sunan Kalijaga, Indonesia, presented a case study on the INDOEDUC4ALL project. This project, conducted from 2016 to 2020, involved multiple local and European partners and focused on addressing the severe underrepresentation of disabled individuals in higher education within Indonesia, a country where less than 1% of people with disabilities are enrolled at universities. The project's approach centred on creating Disabled Students' Support Centres equipped with assistive technologies and developing a national network to foster best practices in inclusive education. Key achievements included significant improvements in institutional capacities to support disabled students, the establishment of modern disability support centres, and the creation of a collaborative network enhancing inter-institutional relations. Ultimately, INDOEDUC4ALL has played a crucial role in promoting inclusive education policies and practices within Indonesian higher education, aligning with national legislation and international disability rights standards, thus contributing to a more equitable access to education for students with disabilities.

Domingo Verano-Tacoronte, Inmaculada Galván-Sánchez y Alicia Bolívar-Cruz presented the ARROW project. ARROW is aimed at enhancing Mongolia's scientific research and development capabilities by addressing key challenges in education, research and innovation. It recognised the need to align Mongolian standards with international benchmarks and promote a culture of high-quality scientific production. Despite significant economic growth, Mongolia lagged in scientific development due to a focus on teaching rather than on research. ARROW, implemented by a consortium of European and Mongolian universities, focused on capacity building through various activities. These included online courses on scientific databases, onsite English courses, workshops on plagiarism, writing skills, problem-solving, seminars on patents, and statistics courses. ARROW also established a mentoring network connecting

young Mongolian researchers with experienced European mentors. The factors that led to success included collaboration among consortium universities. The project's dissemination strategies, including social media engagement and recruitment of mentors, enhanced visibility and impact. Sustainability measures included maintaining the mentoring network, signing agreements for continued cooperation, and local development. The project's achievements included improved research skills, increased publication in international journals, and an enhanced recognition of Mongolia within the academic community. It also contributed to the diversification of research fields in Mongolia and strengthened research networks between Europe and Mongolia. Lessons learned emphasised the importance of active participation of local partners, multicultural management, clear quality assurance measures, and adaptability in the face of challenges such as the COVID-19 pandemic. Overall, ARROW facilitated knowledge exchange, capacity building, and sustainable collaboration, laying the foundation for scientific development in Mongolia.

Claudia Linditsch and Anita Maček presented the TOURIST project's efforts to advance sustainable tourism practices in Thailand and Vietnam. The project established seven competence centers, pivotal hubs for collaboration among students, lecturers, and staff. These centers influenced local communities, tourism associations and international representatives, promoting sustainable practices. The TOURIST project enhanced the reputation of participating universities, creating a robust network among higher education institutions and the tourism sector. It provided a practical roadmap for sustainable tourism, aligning with national policies in Thailand and Vietnam, and catalyzed initiatives such as "Travel Thailand in Style, Reduce Plastic Waste" and "CSR & SET in the Local - Life and Learn" in Thailand, while supporting the Green Growth Strategy in Tourism in Vietnam. Key outputs included a good practice catalogue, needs and GAP analyses, train-the-trainer events, and multiplier training sessions reaching over 250 stakeholders. The competence centers supported more than 100 organizations and communities. Additionally, the creation of an international online network facilitated global collaboration and knowledge exchange. The project's success was attributed to strategic alignment, dedicated teams, stakeholder engagement, collaboration with civil society, and innovative solutions. Sustainability measures ensured financial, institutional, and political longevity, supported by university commitments and alignment with national strategies. Lessons learned highlighted the importance of collaboration, interactive education, capacity building, and balancing economic growth with environmental conservation. The TOURIST project reshaped the sustainable tourism landscape in Thailand and Vietnam, leaving a legacy of responsible tourism practices and empowered individuals dedicated to sustainable tourism.

The CBHE Erasmus+ programme, which funded the LATWORK project, is primarily aimed at strengthening the operational structures of Higher Education Institutions (HEIs). As Victor F. Climent, Elisio Estanque and Meritxell Calbet point out, the needs analyses in LATWORK provided evidence that research activities lack the necessary level of regional structuring, which limits their replicability and visibility. LATWORK operates within this dimension, and the identification of this weakness in research on informal labor is a clear example of the enormous potential of the Erasmus+ program. Led by the UVM, the project' goal was to enhance the understanding of informal work through interdisciplinary cooperation between universities and labor market stakeholders in Chile, Argentina and Brazil. This approach aimed to reduce informality and promote labor rights, highlighting the need for more comprehensive knowledge about the internal and external dynamics of informal labor and its societal impacts. One of the significant achievements of LATWORK was creating a network of research centers and the RedLatt network for regional coordination. This improved interdisciplinary debate and understanding of the causes of informality. However, the project also revealed that the research on informal labor lacks regional structuring, impacting the replication and dissemination of findings. This limitation underlines the critical role of the Erasmus+

program in addressing these gaps. By funding projects like LATWORK, the program demonstrates its commitment to enhancing the capacities of HEIs. This enables them to conduct impactful research that can influence policy and improve social conditions, particularly in regions like Latin America where informal labor is a prevalent and complex issue.

Blanca Ruth Orantes presented the MEANING project, where the need for specialized training in countries such as Guatemala and El Salvador was identified, as well as the lack of articulation between university-industry, which led to a proposal to create master's programs that respond to the needs of the region's professional market and comply with European quality standards. In this context, the modernization of the higher education sector and the improvement of students' employability in the area of Engineering for Industry in both countries were proposed. During the execution of the MEANING project, the goal was to design and implement an innovative Master's Degree in Industrial Engineering with three specializations: Robotics, Telecommunications and Computer Sciences for El Salvador and Guatemala with a matrix of competencies generated from the needs analysis, the basis for the curriculum design recommended by European institutions involved, and the methodological training for faculty members from the beneficiary HEIs. The impact was the modernization of the regional industry with the optimization of production processes and the promotion of research for the industry. Furthermore, the specialization in specific application areas and professional practices in the industrial sector to have highly qualified professionals articulated efforts of the universities for the industrial sector. All the above-mentioned constituted a model for the modernization of other areas of knowledge taught in universities.

Cliona Maher, Yensi Flores and Mark Tangney presented the HONDURAN biotech project. The cornerstone of this training case is the creation of the Biotechnology Laboratory at the National Autonomous University of Honduras (UNAH) through donations of equipment and materials from the University College Cork (UCC). From there, UCC itself carried out the training of the UNAH staff in charge of the Lab, supported by the AMIDILA project —where UCC and UANH were partners— and funded by the Erasmus+ program, specifically by the International Credit Mobility (E+ICM) action (included in Key Action 1). The training activities took place in Cork, Ireland, and Tegucigalpa, Honduras, between 2015 and 2019. The academic mobility was aimed at fostering bio-innovation in UNAH and providing UNAH staff and students with training in synthetic biology research approaches, current technologies and methods. For European researchers, it aimed to provide them with knowledge about internationalization, global context and first-hand experience of issues that could be solved with synthetic biology. Coupling experience and knowledge with problem identification is a key driver of innovation. The aim of this experience was to translate into innovation, global citizenship and internationalization for both institutions, as well as the development and delivery of a replicable capacity building course. In this case study, the authors have summarized the most relevant elements of the process of setting up the laboratory and training through academic mobility, this project being an example of good practice in the field of *development cooperation* between Europe and Central America.

Marta Busquets Calopa, through the IMPALA program, explained the creation and implementation of a quality framework focused on impact assessment of third mission activities to equip Higher Education Institutions (HEIs) in Latin America. This new framework complements existing quality assurance systems traditionally focused on teaching and research, and equips HEIs with the skills to apply this framework to their contexts. This promotes a culture of impact assessment and enhances the quality and relevance of services offered by HEIs to their communities. The program, developed in three key phases, establishes and validates a new evaluation tool called the Impact Assessment Framework (IAF), which enables the evaluation and improvement of all university operations, especially community services;

defines the impact related to universities' "third mission" activities, acknowledging the complexity of this concept; and, finally, also develops and provides the IAF to HEIs, including the methodology and tools necessary to measure the impact of their third mission activities. Through specific tool development, the project benefited the consortium's HEIs and offered a useful approach for other Latin American HEIs to enhance their quality assurance by measuring the impact of their third mission activities.

Jean-Baptiste Maillard and Christophe Terrasse shared their analysis of FORINT —Fortalecimiento de la Internacionalización entre Europa y América Latina (Strengthening internationalization between Europe and Latin America). Between 2016 and 2019, the project gathered eight Cuban and Panamanian universities and the Cuban Ministry of Higher Education. It dealt exclusively with the internationalization of higher education and has introduced 500 participants to its diversity, activities and operationalization in European HEIs. This focus fostered a common understanding of this concept, allowing participants to exchange practices and solutions best suited to their situation and needs. Their knowledge was put into practice in designing and launching a long-term international development strategy validated by the academic board in each institution. This contributed to an increased cooperation between European and Latin American institutions, which is still active today. Five years after its completion, FORINT stands out as an example of a successful Erasmus+ Capacity-Building for Higher Education project. Looking back at the project, the authors identified that its relevance to the local needs and expectations, the partners' involvement in all the activities and the active support of the public authorities can collectively explain this success.

Responding to the nascent interest in social innovation as a driver of socio-economic change in countries across the world, the Lasin and Seasin projects were conceptualized to help universities support their communities more directly by establishing Social Innovation Support Units. As Mark Majewsky Anderson pointed out, these physical spaces would be specially designed to support social entrepreneurship incubation, knowledge exchange with private, public and third sectors, and help support direct engagement with local communities. The Units incorporated a makerspace with 3D printing, VR and IT facilities to help support the development of prototypes by users. Over the course of the two projects, the Social Innovation Support Unit model increased the generation of new social innovations, social enterprises and projects through the development of supportive ecosystems. It also generated new collaborations between university academics, students, communities and social programs at both a local and international level, particularly in low- and middle-income countries, benefitting more disadvantaged or marginalized (potential) entrepreneurs in resource poor environments. It provided students with opportunities for entrepreneurial co-curricular activities to enhance the curriculum and to access new funding opportunities, including microcredit resources. The projects facilitated university engagement with communities, providing students and academics with the capacity, motivation and experience to do so, whilst developing tools to demonstrate and measure the impact, as well as the potential to develop new innovative models for social change.

Elizabeth Bernal Gamboa and Luisa Fernanda Villamizar Rodríguez presented the results of the creation and implementation of the Model for the Management of Research and Innovation in the Andean Region of Latin America: MIMIR ANDINO. This international cooperation initiative, involving 20 institutions from six countries, including government entities, universities, associations, and quality agencies, was co-financed by the European Union within the framework of Erasmus+ projects (CBHE) and coordinated by the Colombian Association of Universities, with the support of OBREAL Global. The model developed includes principles and recommendations in strategic, execution, relational, and administrative components for managing research and innovation, as well as a proposal to redefine R&D evaluation in concert

with institutional characteristics and purposes. The pilots conducted allowed for adjustments to make the model useful for Higher Education Institutions (HEIs) with different maturity levels and contexts. Additionally, a platform for institutional self-evaluation in R&D management was built, some influence was achieved in public policy formulation in the involved countries, students were included in a topic usually exclusive to executives, the impact was expanded to other HEIs beyond project partners, and a Latin American network of coordinators for such projects was created, among other significant impacts. Finally, lessons learned were presented that offered insights for similar projects and, among the most important outcomes, the creation of a new project within the framework of CYTED for an Ibero-American network in research and innovation management, undoubtedly a crucial contribution to the consolidation of cooperation between Latin American, Caribbean and European countries.